

## Right-of-Way Permit E-315-KE

Kodiak Electric Association, Inc.
Subterranean Tunnel 'Upper Hidden Basin Diversion Project
(Terror Lake Hydroelectric Project)
Kodiak National Wildlife Refuge, Alaska

THE SECRETARY OF THE INTERIOR, through his authorized representative, the Chief, Division of Realty, Region 7, U.S. Fish and Wildlife Service, hereinafter referred to as the "Service", in accordance with 16 U.S.C. § 668dd (d), 50 C.F.R. § 29.21, 16 U.S.C. §§ 3161-3173, and 43 C.F.R. § 36, does hereby grant a permit to Kodiak Electric Association, Inc., hereinafter referred to as "Permittee" or "KEA", to use and occupy certain lands located within the Kodiak National Wildlife Refuge (Refuge) in Alaska, hereinafter referred to as the "Refuge" for the purpose of constructing, operating, maintaining, and terminating a subterranean tunnel associated with the Upper Hidden Basin Diversion (UHBD) project. The subterranean tunnel will allow for the passage of additional water to Terror Lake and the existing Terror Lake Hydroelectric facilities, which will provide an increase in the annual hydroelectric generation by about 33 gigawatt-hours (GWh) and will contribute to the continued renewable hydropower generation that displaces diesel fuel consumption in the communities of Kodiak.

## **RECITALS:**

- The existing Terror Lake Hydroelectric Project, FERC No. 2743 was licensed by FERC in 1981 and amended in 1982, 1986 and 1994. The existing project is located on the Terror and Kizhuyak Rivers in Kodiak Island Borough, Alaska and occupies federal lands located within the Refuge that are administered by the U.S. Fish and Wildlife Service, Department of Interior and on federal lands administered by the U.S. Coast Guard. The existing facilities include rockfill dams, spillway, reservoir, tunnels, penstock, power and valve houses, turbines, generators, telecommunications equipment, channels, switchyard, electrical transmission lines and access facilities that include a jetty, access road and appurtenant facilities.

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- On May 26, 2016, KEA, the licensee for the existing Terror Lake Hydroelectric Project No. 2743 filed an

application to amend its license for an action that is referred to as the Upper Hidden Basin Diversion

(UHBD) project. The amendment application was supplemented on October 6, 2016 and April 11, 2017.

The UHBD project involves the construction, operation and maintenance of two new diversion dams on the

Upper Hidden Basin Creek, an underground water pipeline, and a1.2-mile-long underground tunnel to

divert additional water into Terror Lake, as well as a 4-mile-long access road that will extend from the

existing road network to the site of the new diversion dams.

- The construction of the UHBD facilities will occur mostly on lands owned by the State of Alaska,

however, the underground tunnel will occupy an additional 2-acres of federal land located within the

Refuge, which is administered by the Service.

- The existing FERC-licensed project boundary occupies federal land administered by the U.S. Fish and

Wildlife Service and by the U.S. Coast Guard. The UHBD project will revise and expand the existing

FERC-licensed project boundary by approximately 160 acres. Of the approximate 160 acres, 158 acres of

the expanded boundary will extend into State of Alaska owned lands and 2 acres (a segment of the tunnel)

of the expanded boundary will extend into Refuge lands. The remaining portion of the underground tunnel

will be located on lands owned by the State of Alaska.

- The tunnel construction will produce approximately 40,000 cubic yards of spoils that will be placed on a

designated 8-acre site near Terror Lake. The spoils will be spread and graded to simulate natural contours,

covered by previously removed topsoil and revegetated with native plant species present in the area. This

8-acre site is located within the boundaries of the FERC-designated project boundary.

A more detailed description of the information contained in the above Recitals can be found in the FERC

Order Amending License, Revising Project Description and Annual Charges, and Approving Exhibit L

Drawings, issued June 28, 2017, which is attached hereto and incorporated into this permit as Exhibit "A".

Additional information can also be found in the Environmental Assessment report dated May 2017.

1. RIGHT-OF-WAY AUTHORIZATION:

This right-of-way permit authorizes the Permittee to install, operate, maintain, terminate and restore that

segment of an underground hydropower diversion tunnel located on Refuge lands, hereinafter referred to as

the "Project".

2. RIGHT-OF-WAY AREA:

The Project area is comprised of that segment of the underground tunnel located on Refuge land, which will

occupy a footprint of not to exceed 2 acres.

3. PROJECT LOCATION/LEGAL DESCRIPTION:

**3.1.** The Project is located about 30 miles from the City of Kodiak. The Project location is further

described as being located within:

Section 6, Township 30 South, Range 23 West, Seward Meridian, Alaska.

3.2 The project location is depicted in the document prepared by Dowl entitled "Property Ownership

Map" dated July 30, 2015, which is hereby incorporated into this permit as attached Exhibit "B". The

permitted segment of the tunnel is shown by a red line that begins at the Kodiak National Wildlife Refuge

boundary. The segment of the permitted tunnel is also depicted on a draft document prepared by Lachel &

Associates entitled "Plan and Profile Sheet 1 of 1 Tunnel" and noted as "Drawing Number 4", which is

attached hereto as Exhibit "C" and incorporated into this permit. The topography of the project area is

reflected in the annotated satellite imaging entitled "Conceptual Layout", which is attached hereto as

Exhibit "D" and incorporated into this permit.

4. PROJECT CONSTRUCTION

The construction of the tunnel will be performed by using drill and blast techniques and/or a tunnel boring

machine, depending upon the schedule and availability of equipment. The tunnel construction will produce

approximately 40,000 cubic yards of spoils that will be placed on an 8-acre site located near Terror Lake

and will be graded to simulate natural contours. The material will then be covered by previously removed

topsoil and the area will be re-vegetated.

5. TERM

5.1 The term of this Permit is will expire on October 31, 2031 or while it is used for the purpose

granted, whichever period is shorter. The permit term is designed to match the term for the FERC license.

The term of the Permit shall commence upon signature by both parties.

a) If construction is not commenced within 2-years after Permit, the Chief, Division of Realty may terminate

the Permit in accordance with Condition 7.25 below.

b) The Permittee has the **option to apply for a term extension** of the Permit. No later than six (6) months

prior to the termination of this Permit, Permittee may make a request to the Chief, Division of Realty for an

extension of the term of this Permit. Extension of the Permit term shall not be unreasonably withheld if the

FERC license that is set to expire on October 31, 2031 is renewed, the project is in operation, is in

compliance with the terms of this Permit and the future use and configuration of the facilities will be

substantially similar to those authorized in this Permit or any subsequent amendments.

6. INSURANCE

a) Prior to commencement of authorized activities, the Permittee shall provide to the Chief, Division of

Realty, 1011 E. Tudor Rd, MS-211, Anchorage, Alaska 99503, a binder or Certificate of Insurance

demonstrating that the policy is in place and effective, as required below.

b) Permittee shall maintain in effect throughout the term of this Permit, general liability insurance with a

single limit of \$5,000,000 per occurrence. Such insurance shall specifically insure the Permittee against all

commercial general liability assumed by it under this Permit (subject to the customary terms and conditions

of such policies), shall name the United States as an additional insured and shall contain a waiver of

subrogation provision.

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7. GENERAL TERMS AND CONDITIONS

7.1 Meanings of certain terms used herein:

) The term "Authorized Officer" means the Refuge Manager, Kodiak National Wildlife Refuge National

Wildlife Refuge, or designated representative in charge of the land under administration by the U.S. Fish

and Wildlife Service.

b) The "Chief, Division of Realty" is the Chief, Division of Realty, Region 7 (Alaska Regional Office), U.S.

Fish and Wildlife Service, 1011 E. Tudor Rd, MS-211, Anchorage, Alaska 99503.

c) The "Regional Director" is the Regional Director of Region 7 (Alaska Regional Office), U.S. Fish and

Wildlife Service.

d) Permittee is the Permittee, its employees, agents, contractors, or employees of its contractors.

7.2 The Authorized Officer will monitor compliance with Permit terms, conditions and stipulations.

**7.3.** The Service reserves the right to grant additional rights-of-way or permits for compatible uses on or

adjacent to the right-of way granted by this Permit after giving notice to Permittee and an opportunity for the

Permittee to comment.

7.4 The Permittee is responsible for obtaining all necessary State, Federal and/or Kodiak Island

Borough permits prior to the start of construction.

7.5 Permittee will comply with the Archaeological Resources Protection Act (16 U.S.C. 470aa). The

disturbance of archaeological or historical sites and the removal of artifacts from Federal land are prohibited. If

such sites or artifacts are encountered, the Permittee will immediately cease all work upon Federal land and

notify the Authorized Officer.

7.6 Consistent with 50 C.F.R. 25.21(h), the Authorized Officer may require Permit modifications at

any future time to ensure compatibility with the use and occupancy of the land. Additional Permit conditions

and stipulations may be added over the life of the Permit based on new information, technologies, or concerns.

7.7 By accepting this Permit, the Permittee agrees to reimburse the United States for costs incurred by

the Service in processing the Permit application, issuing the Permit, monitoring the construction/installation,

operation, maintenance, removal of facilities within or adjacent to the Permit area and following removal, the

restoration of the land.

**7.8** This Permit is granted subject to outstanding rights, if any, in third parties.

**7.9** Permittee, by accepting this Permit, agrees to the terms and conditions contained herein.

7.10 Permittee, its employees, contractors, or employees of the contractors shall comply with State and

Federal laws applicable to the project within which the Permit is granted, and to the lands included in the

right-of-way, and lawful existing regulations thereunder.

**7.11** Permittee shall clear and keep clear the lands within the right-of-way and Permit area to the extent

and in a manner directed by the Authorized Officer; and to dispose of all vegetative and other material cut,

uprooted, or otherwise accumulated during the construction, operation, maintenance, removal and restoration of

the Project in such a manner as to decrease the fire hazard and also in accordance with such instructions as the

Authorized Officer may specify.

7.12 Permittee shall prevent the disturbance or removal of any public land survey monument or project

boundary monument unless Permittee has requested and received from the Authorized Officer approval of

measures the Permittee will take to perpetuate the location of aforesaid monument.

7.13 Permittee shall take such soil and resource conservation and protection measures, including weed

control on the land covered by the Permit as the Authorized Officer may request.

**7.14** Permittee shall do everything reasonably within its power, both independently and on request of

any duly authorized representative of the United States, to prevent and suppress fires on or near, lands to be

occupied under the Permit area, including making available such construction and maintenance forces as may

be reasonably obtainable for the suppression of such fires.

7.15 Permittee shall rebuild and repair such roads, fences, structures, and trails as may be destroyed or

injured by construction work and upon request by the Authorized Officer, to build and maintain necessary and

suitable crossings for all roads and trails that intersect the works constructed, maintained or operated under the

right-of-way.

**7.16** Permittee shall pay the United States the full value for all damages to the lands or other property of

the United States caused by Permittee, its employees, agents, contractors, or employees of the contractors, and

to indemnify the United States against any liability for damages to life, person or property arising from the

occupancy or use of the lands under the Permit, except where the easement or permit is granted hereunder to a

State or other governmental agency which has no legal power to assume such a liability with respect to damages

caused by it to lands or property, such agency in lieu thereof agrees to repair all such damages. Where the

Permit involves lands that are under the exclusive jurisdiction of the United States, the Permittee, or its

employees, contractors, or agents of the contractors, shall be liable to third parties for injuries incurred in

connection with the easement or Permit area. Grants of easements or permits involving special hazards will

impose liability without fault for injury and damage to the land and property of the United States up to a

specified maximum limit commensurate with the foreseeable risks or hazards presented. The amount of no-fault

liability for each occurrence is hereby limited to no more than \$5,000,000.00.

**7.17** Permittee shall promptly notify the Authorized Officer in charge of the amount of merchantable

timber, if any, which will be cut, removed, or destroyed in the construction and maintenance of the Project, and

to pay the United States in advance of construction such sum of money as the Project Manager may determine

to be the full stumpage value of the timer to be so cut, removed, or destroyed.

7.18 All or any part of this Permit may be terminated by the Chief, Division of Realty, for failure to

comply with any or all of the terms or conditions of the grant, or for abandonment. A rebuttable presumption of

abandonment is raised by deliberate failure of the Permittee to use for any continuous 2-year period the Permit

for the purpose for which it was granted or renewed. In the event of noncompliance of abandonment, the Chief,

Division of Realty will notify in writing the Permittee of the Service's intention to suspend or terminate the

Permit grant 60 days from the date of the notice, stating the reasons therefor, unless prior to that time the

Permittee completes such corrective actions as are specified in the notice. The Chief, Division of Realty may

grant an extension of time within which to complete corrective actions when, in the Service's judgment,

extenuating circumstances not within the Permittee's control such as adverse weather conditions, disturbances

to wildlife during breeding periods or periods of peak concentration, or other compelling reasons warrant.

Should the permittee holder of a right-of-way permit issued under authority of the Mineral Leasing Act, as

amended, fail to take corrective action within the 60-day period, the Regional Director will provide for an

administrative proceeding pursuant to 5 U.S.C. 554, prior to a final Departmental decision to suspend or

terminate the right-of-way permit. In the case of all other right-of-way permit holders, failure to take corrective

action within the 60 day period will result in determination by the Chief, Division of Realty to suspend or

terminate the permit. No administrative proceeding shall be required where the easement or permit terminates

under its terms.

**7.19** Permittee shall restore the land to its original condition to the satisfaction of the Authorized Officer

so far as it is reasonably possible to do so upon revocation and/or termination of the Permit, unless this

requirement is waived in writing by the Chief, Division of Realty. Termination also includes permits or

easements that terminate under the terms of the Permit grant. Restoration requirements are further set forth in

Special Stipulation number 8.5.

**7.20** Permittee shall keep the Authorized Officer and the Chief, Division of Realty informed at all times

of the Permittee's address, and, in case of corporations, of the address of its principal place of business and the

names and addresses of its principal officers.

7.21 In the construction, operation, maintenance, removal and restoration of the project, Permittee, its

employees, contractors, or employees of the contractors shall not discriminate against any employee or

applicant for employment because of race, creed, color, or national origin and shall require an identical

provision to be included in all subcontracts.

7.22 The grant of the Permit shall be subject to the express condition that the exercise thereof will not

unduly interfere with the management, administration, or disposal by the United States of the land affected

thereby. The Permittee agrees and consents to the occupancy and use by the United States, its grantees,

permittees, or lessees, of any part of the Permit area not actually occupied for the purpose of the granted rights

to the extent that it does not interfere with the full and safe utilization thereof by the Permittee. The Permittee

also agrees that authorized representatives of the United States shall have the right of access to the Permit area

for making inspections and monitoring the construction, operation and maintenance of facilities.

7.23 The Permit herein granted shall be subject to the express covenant that any facility constructed

thereon will be modified or adapted, if such is found by the Authorized Officer to be necessary, without liability

or expense to the United States, so that such facility will not conflict with the use and occupancy of the land for

any authorized works which may hereafter be constructed thereon under the authority of the United States. Any

such modification will be planned and scheduled so as not to interfere unduly with or have minimal effect upon

continuity of energy and delivery requirements.

7.24 The Permit herein granted shall be for the specific use described and may not be construed to

include the further right to authorize any other use within the Permit area unless approved in writing by the

Chief, Division of Realty.

7.25 CONSTRUCTION

(a) If construction is not commenced within two (2) years after date of right-of-way grant, the right-of-way

Permit may be canceled by the Chief, Division of Realty at his/her discretion.

(b) Proof of construction. Upon completion of construction, the Permittee shall file a certification of

completion and as-built drawings and survey of the completed facilities with the Authorized Officer and the

Chief, Division of Realty.

7.26 DISPOSAL, TRANSFER OR TERMINATION OF INTEREST

(a) Change in jurisdiction over and disposal of lands. The final disposal by the United States of any tract of

land traversed by a right-of-way shall not be construed to be a revocation of the right-of-way in whole or in part,

but such final disposition will be deemed and taken to be subject to such right-of-way unless it has been

specifically canceled.

(b) Transfer of easement or permit. Any proposed transfer, by assignment, lease, operating agreement or

otherwise, of this Permit, must be filed in triplicate with the Chief, Division of Realty and must be supported by

a stipulation that the transferee agrees to comply with and be bound by the terms and conditions of the original

Permit grant and Permit amendments, if any. A \$25.00 non-returnable service fee must accompany the

proposal. No transfer will be recognized unless and until approved in writing by the Chief, Division of Realty.

(c) Disposal of property on termination of right-of-way permit. In absence of any agreement to the contrary, the

Permitee will be allowed 6 months after termination to remove all property or improvements, placed thereon by

Permitee; otherwise all such property and improvements shall become the property of the United States.

Extensions of time may be granted at the discretion of the Chief, Division of Realty.

8. SPECIAL STIPULATIONS

8.1 Permittee shall follow and comply with the requirements of the Spill Prevention Control and

Countermeasure Plan prepared by SLR International Corporation for Kodiak Electric Association, Inc., which

is hereby incorporated into this permit as attached Exhibit "E".

**8.2** Permittee shall follow and comply with the requirements of the Kodiak Electric Association, Inc.'s

Bear Safety Plan, which is hereby incorporated into this permit as attached Exhibit "F".

8.3 In addition to the requirement contained in Special Stipulation 8.2 above, should a bear incident

occur, Permittee must complete and submit to the Authorized Officer the attached Human-Bear Incident Report

which is hereby incorporated into this permit as attached Exhibit "G". A bear incident is defined as the taking or

attempting to take a bear in defense of life or property; use of less-lethal deterrents, use of non-lethal deterrents;

human injury or death; or damage to camp or equipment by bear(s).

**8.4** Permittee shall follow and comply with the requirements of the Kodiak Electric Association, Inc.'s

KEA Contract Terms and Conditions, Special Provisions Related to Safety & Environmental Protection, which

is hereby incorporated into this permit as attached Exhibit "H".

8.5 Within 1-year after abandonment or within 1-year after expiration or other termination of this

permit, Permittee shall at its own expense reclaim and restore the land covered by this ROW permit. The

restoration work will be comprised of plugging the tunnel and removing the existing outlet structure. The area

will then be covered and revegetated. A final inspection of the restoration work will be conducted by the

Authorized Officer, as per General Stipulation number 7.19.

9. FINAL '4(e) CONDITIONS' (taken from the FERC Order Amending License, Revising Project

Description and Annual Charges, and Approving Exhibit L Drawings, issued June 28, 2017, attached as Exhibit

"A")

**9.1** (Condition 1)

At least six months before the start of any land-disturbing or land-clearing activities associated with

Project construction, the licensee must file, for Commission approval, a vegetation management plan

(Plan), approved by the Kodiak National Wildlife Refuge Manager, which provides the elements

specified below. The purposes of this plan are to establish a diversity of native vegetation on all tunnel

rock placement areas and associated paths and storage areas disturbed by Project construction; and to

prevent introduction and spread of invasive species and noxious weeds during Project construction

and operation.

The Plan must be developed after consultation with the Service and the Plant Materials Center, Alaska

Division of Agriculture. The licensee must include with the plan: documentation of consultation,

copies of comments and recommendations on the completed plan after it has been prepared and

provided to the agencies, and specific descriptions of how the agencies' comments are accommodated

by the Plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make

recommendations before filing the plan with the Commission. If the licensee does not adopt a

recommendation, the filing must include the licensee's reasons, based on Project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must

not begin until the licensee is notified by the Commission that the Plan is approved. Upon

Commission approval, the licensee must implement the Plan, including any changes required by the

Commission.

The Plan should include, at a minimum, provisions for:

1. A pre-disturbance vegetation survey by a qualified botanist documenting baseline conditions,

including lists of native and non-native plant species, percent of vegetated and non-vegetated areas,

and relative abundance of species (by canopy cover) present on the proposed disposal site and

associated disturbed areas.

2. A plan to establish at least 60 percent of the baseline canopy cover by dominant, native species on

areas to be revegetated. Objectives for species diversity must also be included.

3. A timeline for attainment of revegetation objectives.

4. A monitoring plan, implemented by a qualified botanist, to document progress toward revegetation

objectives.

5. An adaptive management plan to address any failures to meet revegetation objectives by the times

specified in the Plan.

6. A plan for identifying and controlling invasive species, including a description of best management

practices to be followed to prevent introduction and spread of invasive plants during Project

construction and operation. Measures shall include provisions to clean (e.g., power wash) and inspect

all construction related equipment and materials off-site prior to entry into the Project area, and use of

certified weed-free seed if seeding is used to re-vegetate the site.

7. Monitoring for, and treatment of, invasive species during and after construction. The licensee shall

be responsible for treatment and at least two years of post-treatment monitoring if new invasive

species are present post-construction (i.e., not in pre-construction survey).

**9.2** (Condition 2)

Construction activities and project-associated helicopter traffic at the portal site (south end of Terror

Lake) is prohibited from January 1 to June 1 of each year to avoid disturbance of brown bears in, and

emerging from, dens.

**9.3** (Condition 3)

Withdrawn

**9.4** (Condition 4)

The licensee shall develop and submit a written plan to manage water levels in Terror Lake to ensure

availability of sufficient water to meet the instream flow requirements specified in Article 43 during

periods of low reservoir inflows (e.g., during periods of low precipitation, unusually cold spring

weather, etc.).

**9.5** (Condition 5)

The licensee will develop a plan to monitor waste rock leachate during construction, to test for acid

production from rock excavated from the tunnel. Monitoring will continue through the construction

period each year until surface water at the waste rock disposal site freezes in the fall. If acid drainage

is documented, the licensee will develop and implement measures to mitigate and manage the acid

drainage from the waste rock. An adaptive management approach may be needed.

**9.6** (Condition 6)

Prior to completion of the outlet tunnel and portal, the licensee must file, for Commission approval, an

engineer approved and stamped design for the outflow channel between the outlet portal and Terror

Lake reservoir. The submission must be approved by the Kodiak National Wildlife Refuge Manager.

The design should provide the following outcomes: 1) minimize initial sediment transport and erosion,

2) provide a channel that is stable both laterally and vertically, 3) minimize erosion of the lake shore

and bottom with flows anticipated to discharge from the tunnel, and 4) encourages vegetation within 2

feet of the water's edge adjacent to the channel downstream of the excavated rock gully.

**END OF STIPULATIONS** 

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Upper Hidden Basin Diversion Project (Terror Lake Hydro)

THIS IS TO CERTIFY that the instrument, together with all terms a			ermit described in this
IN WITNESS WHEREOF, I have h	nereunto set my hand	this day of	, 20
	Signature		
	Printed Name:		
	Title:		
ACKNOWLEDGMENT			
STATE OF ALASKA	)		
THIRD JUDICIAL DISTRICT	) ss: )		
THIS IS TO CERTIFY that on the _ the State of Alaska, duly  within instrument on behalf of the c	hose title isompany, and who ack		, who executed the
and voluntarily for the uses and pur IN WITNESS WHEREOF, I have h written above.	•	and affixed my official sea	ıl, the day and year first
(SEAL)		Notary Public in and for My commission expires:	

	agh his authorized representative has executed this Permit, America on this day of,
	Douglas Campbell Chief, Division of Realty U.S. Fish and Wildlife Service, R7
ACKNO	DWLEDGMENT
STATE OF ALASKA ) ) ss: THIRD JUDICIAL DISTRICT )	
the State of Alaska, duly commission, known to r	ne to be the Chief, Division of Realty, U.S. Fish and
Wildlife Service, Region 7, who executed the wit was signed freely and voluntarily for the uses an	hin instrument and who acknowledged to me that the same d purposes therein stated.
WITNESS my hand and notarial seal the day and	d year first above written in this certificate.
(SEAL)	Notary Public in and for Alaska My commission expires: